

Year 9/10 Competitive Robotics

Semester Course Outline

Competitive robotics is a subject that takes inspiration from the international Robocup competition. Students will develop their computer and design thinking skills to compete against their peers in events such as robotic soccer, dance/drama and obstacle courses. Students will communicate their process and strategies via videos, logbooks and posters. This course is excellent preparation for students intending to join the school Robocup jr. team or for those who would like to improve their teamwork, coding and algorithmic thinking.

Learning Outcomes

Students will be assessed on the following Learning Outcomes:

- Y9/10.991 Technologies - Creates and connects design ideas and processes of increasing complexity and justifies decisions
- Y9/10.994 Technologies - Selects and uses appropriate technologies skillfully and safely to produce high-quality designed solutions suitable for the intended purpose
- Y9/10.1022 Technologies - Plans and manages digital projects using an iterative approach
- Y9/10.1023 Technologies - Defines and decomposes complex problems in terms of functional and non-functional requirements
- Y9/10.1027 Technologies - Tests and predicts results and implements digital solutions
- Year.9.420 Science - Analyses methods used and the quality of data personally collected and explains specific actions to improve the quality of evidence
- Year.10.434 Science - Constructs evidence-based arguments and selects appropriate representations and text types to communicate science ideas for specific purposes
- Year.8.409 Science - Constructs representations of data to reveal and analyse patterns and trends, and uses these when justifying conclusions

Assessment Tasks

Students will be assessed on their participation and completion of classwork and assessment tasks.

Task	Week Due*
Performance Video	Term 1, Week 5
Rescue Logbook	Term 1, Week 10
Soccer Poster	Term 2, Week 7

*Due dates are an estimate only

Teachers: Cherie Wilkinson

Executive Teacher: Jo Power and Clare Incher